

REMARKS

Claims in the case are 1, 3, 5-7, 10 and 12-17 upon entry of this amendment. Claims 1 has been amended, Claims 16 and 17 have been added, and Claims 4, 8 and 11 have been cancelled herein.

Claim 1 has been amended herein to include the subject matter of Claim 11 and page 8, lines 12-15 of the specification. Claim 11 has been accordingly cancelled herein.

Basis for added Claim 16 is found in Claim 1 and Claim 4, of which it is a combination. Claim 4 has been accordingly cancelled herein.

Basis for added Claim 17 is found in Claim 1 and Claim 8, of which it is a combination. Claim 8 has been accordingly cancelled herein.

Applicants note the withdrawal of the previous obviousness rejections over: (i) United States Patent No. 4,973,102 (Bien) in view of United States Patent No. 3,458,618 (Burns et al); and (ii) Bien in view of Burns et al, and further in view of United States Patent No. 6,547,317 B1 (Cheron et al), as stated on page 2 of the Office Action of 4 August 2004.

Claims 1, 3, 5-7 and 10-15 stand rejected as being anticipated by United States Patent Number 5,702,779 (Siebelink, Jr. et al). This rejection is respectfully traversed with regard to the amendments herein and the following remarks.

Siebelink, Jr. et al disclose a plastic panel assembly for use in a vehicle, that includes: (i) a frame structure (14), defining a central opening, having at least three slots (22) in its peripheral region (25, 27); and (ii) a plastic panel structure (12) that abuts the peripheral region of the frame structure. The peripheral region of the plastic panel structure has pins (24) that extend through the slots of the frame structure, thereby connecting the frame structure and plastic panel structure together. The pin and slot connections are constructed so as to prevent relative movement of the pin within the slot along the plane in one direction within which the pin and slot connection is disposed. At the same time, the pin and slot connections are constructed so as to allow relative movement of the pin within the slot along the plane generally in directions away from and toward the common point (to which the longitudinal axis of the slots are oriented). See the abstract and column 2, lines 6-37 of Siebelink, Jr. et al.

Siebelink, Jr. et al disclose the pins of the plastic panel structure being held in the slots of the frame structure by means of a multi-component fastening structure. The multi-component fastening structure is disclosed by Siebelink, Jr. et al as including a slip washer (28) and a fastener (30) having barbs (32) that are both circumferentially fitted around pin (24). See column 4, lines 5-19, and Figure 4 of Siebelink, Jr. et al.

The composite structural article of Applicants' present Claim 1 includes plastic rivet joining elements that comprise a rivet shaft and a rivet head that are necessarily continuous one with the other due to the means by which the plastic rivet joining elements are formed. In present Claim 1, the plastic rivet joining elements are formed concurrently when the plastic of plastics part (b) is injection molded onto core body (a), which results in the plastics material flowing through the perforations of the core body, thus concurrently forming the rivet shaft and the rivet head. See present Claim 1 herein.

The fastening structure of Siebelink, Jr. et al is a multi-component structure that includes a slip washer (28) and a fastener (30) having barbs (32) that are both circumferentially fitted around pin (24). The slip washer and fastener of Siebelink, Jr. et al's fastening structure are separate from and are not continuous with the pin (24) that they are circumferentially fitted around. The fastening structure of Siebelink, Jr. et al's plastic panel assembly does not reasonably extend to or touch upon the plastic rivet joining elements of the composite structural article of Applicants' present Claim 1. Siebelink, Jr. et al do not disclose, teach or suggest the composite structural article of Applicants' present Claim 1.

It is noted that the present rejection does not include Claims 4 and 8. As discussed previously herein, independent Claims 16 and 17 have been added herein and are combinations of Claims 1 and 4, and Claims 1 and 8, respectively.

In light of the amendments herein and the preceding remarks Applicants' claims are deemed to be unanticipated by and patentable over Siebelink, Jr. et al. Reconsideration and withdrawal of the present rejection is respectfully requested.

Claims 4 and 8 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Siebelink, Jr. et al in view of United States Patent No. 5,062,248 (Kunert). This rejection is respectfully traversed with regard to the amendments herein and the following remarks.

Siebelink, Jr. et al has been discussed previously herein and discloses a plastic panel assembly for use in a vehicle, that includes: (i) a frame structure (14), defining a central opening, having at least three slots (22) in its peripheral region (25, 27); and (ii) a plastic panel structure (12) that abuts the peripheral region of the frame structure. The peripheral region of the plastic panel structure has pins (24) that extend through the slots of the frame structure, thereby connecting the frame structure and plastic panel structure together. The pin and slot connections are constructed so as to prevent relative movement of the pin within the slot along the plane in one direction within which the pin and slot connection is disposed. At the same time, the pin and slot connections are constructed so as to allow relative movement of the pin within the slot along the plane generally in directions away from and toward the common point (to which the longitudinal axis of the slots are oriented).

The pins of the plastic panel structure are disclosed by Siebelink, Jr. et al as being held in the slots of the frame structure by means of a multi-component fastening structure. The multi-component fastening structure is disclosed by Siebelink, Jr. et al as including a slip washer (28) and a fastener (30) having barbs (32) that are both circumferentially fitted around pin (24).

Kunert discloses an automobile glass pane (1) which is attached to the fixing web (3) of the window frame of an automobile body by means of an interposed structure (4, 12) that is glued there-in-between. The assembly of Kunert includes a profile strand (e.g., 4) of hardened adhesive material having a U-shaped cross-sectioned cavity. The glass pane (1) includes a frame-like coating (2) along the edge thereof. The profile strand (4) is glued to the frame-like coating (2). See the abstract; column 3, lines 15-65; and Figure 1 of Kunert.

An adhesive strand (e.g., 12) fills the entire cavity of the profile strand (4), according to Kunert. Filling of the entire cavity of the profile strand (4) by the adhesive strand (12) provides a form-fitting connection there-between. See column 2, lines 62-65 of Kunert.

The pin and slot connections of Siebelink Jr., et al are constructed to allow for relative movement of the pin within the slot. That is, the pin and the slot of Siebelink Jr., et al's plastic panel assembly are dimensioned such that the pin does not fill the slot entirely. Siebelink Jr., et al do not disclose, teach or suggest the pins filling entirely the slots into which they extend. A necessary and essential feature of Kunert's automobile glass pane / window frame assembly is the cavity of the profile strand (e.g., 4) being entirely filled with the adhesive strand (e.g., 12), which results in a form-fitting connection, which does not allow for relative movement there-between. Kunert do not disclose or suggest partially filling the cavity of the profile strand with the adhesive strand.

Siebelink Jr., et al disclose the frame structure and plastic panel structure of their plastic panel assembly being fixed together in their peripheral regions by means of pins extending from the plastic panel structure through the slots of the frame structure. Siebelink Jr., et al provide no disclosure, teaching or suggestion with regard to attaching the frame and plastic panel structures together by means of gluing. An essential feature of the automobile glass pane of Kunert is the presence of an interposed structure that is separate from the glass pane and the fixing web of the window frame. The interposed structure of Kunert's assembly comprises the adhesive strand (12) filling entirely the cavity of the profile strand (4), wherein the interposed structure is glued to the glass pane (1) and the fixing web (3) of the automobile body window frame. Kunert provides no disclosure, suggestion or teaching with regard to attaching the glass pane to the window frame by means of pins extending from the glass pane into slots in the automobile body window frame.

Siebelink Jr., et al disclose their panel assembly as including pins extending from the plastic panel structure into and only partially filling slots in the peripheral region of the frame structure. Siebelink Jr., et al do not disclose or suggest either the frame or plastic panel structure of their assembly having a cavity that is partially or totally filled with something extending from the other structure. Siebelink Jr., et al

only discloses slots, and does not suggest a fastening / connection means that includes a cavity. An essential feature of the glass pane and frame structure of Kunert is a fastening means that includes a profile strand having cavity that is entirely filled with an adhesive strand. Kunert does not disclose, teach or suggest the presence of slots in either the glass pane, frame or fixing web, and does not suggest or teach fastening the glass pane to the frame by means of pins extending into and only partially filling slots.

In light of the preceding remarks, it is submitted that neither Siebelink Jr., et al nor Kunert provide the requisite disclosure that would motivate a skilled artisan to combine or otherwise modify their respective disclosures. As the Court of Appeals for the Federal Circuit has stated, there are three possible sources for motivation to combine references in a manner that would render claims obvious. These are (1) the nature of the problem to be solved, (2) the teaching of the prior art, and (3) the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998). The nature of the problem to be solved and the knowledge of persons of ordinary skill in the art are not present here and have not been relied upon in the rejection. As for the teaching of the prior art, the above discussion has established that neither of the patents relied upon in the rejection provide the requisite teaching, and certainly do not provide the motivation or suggestion to combine that is required by Court decisions.

Applicants respectfully submit that Kunert has been mischaracterized on page 5 of the Office Action of 4 August 2004. Kunert discloses, as an essential feature of his glass pane and frame assembly, the presence of an interposed structure (4, 12) that is glued and/or otherwise adhered to each of the glass pane (1) and the fixing web (3) of the automobile window frame. The interposed structure of Kunert's assembly comprises an adhesive strand (12) filling entirely the cavity of the profile strand (4), wherein the interposed structure is glued to the glass pane (1) and the fixing web (3) of the automobile body window frame. As such, the disclosure of Kunert does not reasonably extend to or touch upon the disclosure of either Siebelink Jr., et al or Applicants' present claims.

Even if Siebelink Jr., et al and Kunert were combined, Applicants' presently claimed composite structure would not result from such combination, but for the

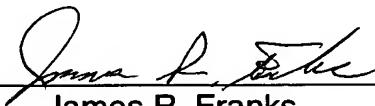
impermissible application of hindsight reconstruction. Siebelink Jr., et al and Kunert, either alone or in combination, do not disclose, teach or suggest the composite structural article of Applicants' present Claim 1 which includes plastic rivet joining elements that comprise a rivet shaft and a rivet head that are necessarily continuous one with the other due to the means by which the plastic rivet joining elements are formed. Siebelink Jr., et al and Kunert, either alone or in combination, do not disclose, teach or suggest the composite structural article of Applicants' present Claim 16, wherein plastics part (b) forms a rib structure having a plurality of intersecting ribs, and the joining elements are located at the intersections of the ribs. Siebelink Jr., et al and Kunert, either alone or in combination, do not disclose, teach or suggest the composite structural article of Applicants' present Claim 17 which further comprises at least one fixed joining element that provides no reversible frictional movement between the core body (a) and the plastics part (b) along the x and y directions of the plane of each of the core body and the plastics part.

The use of hindsight reconstruction of an invention is an inappropriate process by which to determine patentability. *In re Rouffet*, 47 U.S.P.Q.2d at 1457. See also, *In re Fritch*, 972 F.2d 1260 (Fed. Cir. 1992). "To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." *W.L. Gore & Assoc. v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 1075 (Fed. Cir. 1988).

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to be unobvious and patentable over Siebelink Jr., et al in view of Kunert. Reconsideration and withdrawal of the present rejection is respectfully requested.

In light of the amendments herein and the preceding remarks, Applicants' presently pending claims are deemed to define an invention that is unanticipated, unobvious and hence, patentable. Reconsideration of the rejections and allowance of all of the presently pending claims is respectfully requested.

Respectfully submitted,

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